THE PUZZLE SCHOOL

"Math, it's a puzzle to me. I love figuring out puzzles." ~ Maya Lin

"Once I get on a puzzle, I can't get off." ~ Richard Feynman

"Creativity is just connecting things." ~ Steve Jobs

"For me, writing a novel is like solving a puzzle." ~ Mohsin Hamid

"As a kid, I just got lost in the puzzle of acting, the magic of it." ~ Michael J. Fox
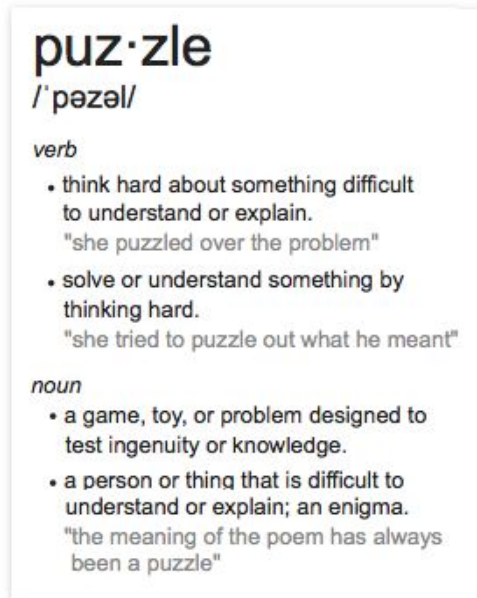
What Is A Puzzle?

Puzzles are about far more than jigsaw puzzles. They can describe many activities ranging from learning calculus to creative work to solving mysteries to scientific discoveries.

The dictionary definition declares puzzles to be something that is difficult to understand, that is solved by thinking hard. Someone may try to "puzzle something out" referring to the process of solving a complex problem.

puz·zle
/ˈpəzəl/

verb
- think hard about something difficult to understand or explain.
  "she puzzled over the problem"
- solve or understand something by thinking hard.
  "she tried to puzzle out what he meant"

noun
- a game, toy, or problem designed to test ingenuity or knowledge.
- a person or thing that is difficult to understand or explain; an enigma.
  "the meaning of the poem has always been a puzzle"

The Puzzle School looks at education through this lens, as a complex problem that requires deep thought, many ideas, feedback and constant iteration to solve:

"Solving interesting and appropriately difficult challenges through a process of observation, ideation, testing, feedback, and iteration; piecing things together to form a cohesive whole."

In this way The Puzzle School treats everything from the design and administration of the school to each student's individual experience at The Puzzle School as a process; a process akin to Design Thinking or The Scientific Method; a process of continuous improvement based on the ideas and feedback of everyone involved.

The School Is A Puzzle

The Student's Experience Is A Puzzle

The Learning Process Is A Puzzle

The Creative Process Is A Puzzle

Observations

The puzzle-solving process starts with observations. The following observations inform the design of The Puzzle School:

- In order to do your best work you need to be in an environment where you feel trusted and respected. Maybe more importantly, though, you need to care about the work. You must be interested in doing it. It can't be coerced. Your best work can only come if you legitimately care about it.

- The most effective learning tends to come when information is presented in different formats, with the learner in the driver's seat, and in a manner that encourages experimentation and missteps. Testing your understanding, receiving feedback, and developing a better understanding based on that feedback is a crucial part of the learning process.

- The range of skills and knowledge used by adults is extremely diverse and not limited to the subjects taught in school. Too often, though, the only time students have to explore the diverse options that exist in the real world and cultivate their own personal interests and talents is outside of school hours.

- The relationships formed through school are often as important or more important than what is learned. Students consistently benefit from healthy relationships with peers and adults who respect who they are, the challenges they face, and their goals, especially if the community advocates for each other.

"As soon as children find something that interests them they lose their instability and learn to concentrate."
        ~ Dr. Maria Montessori

"If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea."
    ~ Antoine de Saint-Exupery

School Design And Administration

The puzzle metaphor deeply informs the design and the day-to-day operations of The Puzzle School. The following techniques are a few examples:

Holistic School Assessment *

The Puzzle School will seek feedback from students, parents, and teachers on a regular basis through surveys and text messages. This feedback will help The Puzzle School improve everything from the student's academic experience to their social and emotional experience to the logistical and communication challenges of interacting with the school.

* The Puzzle School has developed, in collaboration with the Massachusetts Consortium for Innovative Education Assessment (MCIEA), a holistic assessment tool that will help schools internally evaluate their strengths and weaknesses based on feedback from teachers, students, and parents, providing an alternative to purely test-driven assessment.

Community Interaction

The Puzzle School has developed online tools that allow parents and community members to easily communicate with The Puzzle School, providing feedback and supporting it through volunteer efforts. The tools allow community members to detail their desired time commitment, their skills, their interests, contact information, etc. This way The Puzzle School will be able to piece together all available community resources in a respectful manner that effectively supports each student.

Program & Resource Laboratory

The Puzzle School will carve out space and time to act as a laboratory for new programs and resources. As students test new ideas they will provide feedback and collaborate around improving each idea, encouraging students to not just use each resource, but to analyze the resource, think about how to improve it, and practice providing feedback on it. These experiences will help students move away from a consumer mentality and more toward becoming a designer of their own educational experiences.

The Student Experience

The student's experience at The Puzzle School will also derive from the puzzle philosophy. The goal is to prepare students for college and the real world while also providing time for them to learn more about the world, themselves, and their personal interests.

Student Identity

Our hope is that a student attending The Puzzle School will begin to identify themselves as someone who is capable of solving complex puzzles or problems, supporting them as they approach complex problems in life. Similarly we hope they will view the school itself as a puzzle that they can change to create a better fit for themselves and their peers.

"I don't know anything about life yet. Life is like a puzzle and my pieces are spread all over the world."

~ Ville Valo

Advising, Internships & Mentors

Every attempt will be made to connect students with adults, both inside the school and in the community who can advise students in different ways. Each student will meet with an advisor at least one hour each week. Advisors will help students connect with internships and mentors in the community that can help support students in their interests.

"I'm probably wouldn't do anything differently if I had to do it again. Every little thing that happens to you, good and bad, becomes a little piece of the puzzle of who you become."

~ David Foster

Retrospectives

On a weekly basis students and staff will have retrospectives. Retrospectives allow everyone to provide positive and negative feedback about the school environment in an efficient manner. The process allows students to practice their observation and introspection skills, gives students a greater voice in the school, and provides opportunities for students and staff to understand the perspective of each other.

"I tell people all the time, as I was going through my process of being a comedian or being an actor and a writer at 'SNL,' I tell people that everything you do is all a piece of your puzzle to determine where you're going to end up at."

~ J. B. Smoove

Negotiated, Competency-Based Requirements

Graduation requirements will be competency-based, allowing students to complete the requirement at any time and move at an accelerated pace or get extra help when necessary. Students will be able to negotiate requirements, encouraging a dialog between the student and adults regarding what skills will be best serve that student in college, career, and life.

The Learning and Creative Process

Learning and creating both require a process akin to solving a puzzle. It might also be described as Design Thinking or the Scientific Method. It is a process that requires deep observation, ideation, testing hypotheses and seeking feedback, and iterating on that feedback making nonlinear progress.

This process applies to learning how to paint or do calculus. In each case you are trying to connect the dots between your skills and your knowledge until they makes sense and you see the whole picture, allowing you to use those skills and knowledge to approach novel problems.

When you engage in a creative endeavor, be it painting a picture, developing software, or planning a political campaign, you go through the same process. You will develop a hypothesis, based on your objective and your understanding of how best to achieve that objective and you'll try it out. The hypothesis may be that a specific brush stroke will create the aesthetic you seek of that an algorithm will efficiently process the data you are working with. Either way you will go through an iterative process akin to solving a puzzle.

It is this process that inspired The Puzzle School and it is this process that we hope students will develop great expertise in through frequent practice. A student who is capable of observing deeply and developing ideas will be empowered to approach any challenge in the world confidently. A student who tests their hypotheses, seeks feedback, and iterates constantly until they find success has the tools to persist toward any goal that is important to them.

This is the mission of The Puzzle School. To create a structured but flexible and responsive environment that supports students in discovering the world and themselves and gives them the tools and knowledge necessary to make their unique contribution to the world.

"Writing is a puzzle you'll spend your lifetime unlocking. You will never know it all; you will never know enough. You can always be better, and figuring out how to be better is part of the thrill and joy of the job."
~ Holly Lisle

Once I began doing stand-up, I didn't get a kick out of the applause or the attention, but I did get a kick out of the puzzle aspect of it, searching for the right bit, adding another few pieces each night until the bigger picture appears. That's the appeal: the challenge of it.
~ Stephen Merchant

So this was the big secret historians keep: historical research is wildly seductive and fun. There's a thrill in the process of digging, then piecing together details like a puzzle.
~ Nancy Horan